

Listing of claims:

34. (Currently amended) A method for providing transaction services in an ATM or Kiosk having at least one transaction device of at least one transaction device type, the at least one transaction device having capabilities, comprising the steps of:

providing the ATM or the ATM or Kiosk having at least one transaction device type, with the capabilities of transaction devices within the transaction device type being non-identical between more than one ATM or Kiosk across a network of ATMs or Kiosks, controlling said ATM or Kiosk being controlled by at least one software application and an operating system, both of which are installed in the ATM or Kiosk;

wherein the at least one software application interacts with said at least one transaction device of said transaction device type through a programming interface of middleware software comprising transaction objects providing transaction services; and

wherein the <u>particular</u> transaction services provided by the transaction objects depend on the capabilities of the transaction device type, <u>with different transaction services being provided for different transaction device capabilities</u>, but the programming interface of the transaction objects is independent of the capabilities of the transaction device.

35. (Currently amended) The method of Claim 34, further comprising providing

wherein said transaction machine further comprises ATM or Kiosk with a data communications interface over which said ATM or Kiosk communicates and wherein said transaction machine is adapted to communicate over said data communications interface.

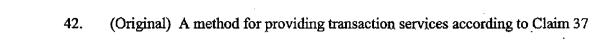
36. (Cancelled)

- 37. (Previously presented) A method for providing transaction services according to

 Claim 34 wherein the transaction objects are controls for performing standardized device functions.
- 38. (Currently amended) A method for providing transaction services according to Claim

 37, further comprising providing wherein said transaction machine further comprises ATM or

 Kiosk with a customizable user interface.
- 39. (Original) A method for providing transaction services according to Claim 38 wherein said transaction objects are independent of said user interface.
- 40. (Currently amended) A method for providing transaction services according to Claim 39, further comprising providing said ATM or Kiosk with a plurality of controls, at least one of which comprises a capabilities interface.
- 41. (Currently amended) A method for providing transaction services according to Claim
 40 wherein the capabilities interface communicates ean communicate the capabilities of the control.



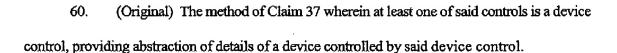
wherein applications, objects and controls are concurrently operable.

- 43. (Currently amended) A method for providing transaction services according to Claim 37 wherein controls are constructed with an event generating capability and wherein [[a]] said controls are operable in a selectable mode in which said events are queued up and delivered to an application on demand.
- 44. (Currently amended) A method for providing transaction services according to Claim
 34 wherein said middleware software is adapted to provide provides service in accordance with at
 least one software standard for interacting with different hardware systems.
- 45. (Original) The method for providing transaction services according to Claim 44 wherein said at least one software standard is selected from a group consisting of WOSA XFS, OPOS, OFX, TOPEND®, ActiveX®, Javabeans, SNMP.
- 46. (Original) A method for providing transaction services according to Claim 34 wherein all errors and transgressions are asserted by the middleware software.
- 47. (Currently amended) A method for providing transaction services according to Claim
 34 further comprising the step of the middleware software writing trace data to memory and then
 copying the trace data copies it to disk only when the ATM or Kiosk transaction machine is idle.

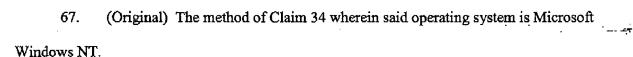
- 48. (Currently amended) A method for providing transaction services according to Claim 34, further comprising providing said ATM or Kiosk with a web browser.
- 49. (Original) A method for providing transaction services according to Claim 48 where said at least one software application is operable from within said web browser environment.
- 50. (Original) A method for providing transaction services according to Claim 49 wherein said web browser provides support for software distribution.
- 51. (Currently amended) A method for providing transaction services according to Claim 49, further comprising <u>providing said ATM or Kiosk with</u> a web browser frame containing at least one device control operable to detect events which must be responded to upon occurrence.
- 52. (Original) A method for providing transaction services according to Claim 48 wherein said middleware software comprises a plurality of COM components having a scriptable ActiveX® interface.
- 53. (Original) A method for providing transaction services according to Claim 48 wherein said middleware software comprises a plurality of JavabeansTM components having a scriptable interface.

- 54. (Currently amended) A method for providing transaction services according to Claim
 48 wherein said web browser communicates is adapted to communicate with conventional web sites to
 be displayed by the <u>ATM or Kiosk computer based transaction machine</u>.
- 55. (Original) A method for providing transaction services according to Claim 48 wherein middleware software allows or disallows access to particular web sites according to a rule database.
- 56. (Currently amended) A method for providing transaction services according to Claim
 48 wherein middleware software <u>customizes</u> is adapted to customize time-out of the display of
 individual internet web sites.
- 57. (Currently amended) A method for providing transaction services according to Claim

 34 wherein the <u>ATM or Kiosk computer-based transaction machine enables</u> is adapted to allow the software applications and middleware to be altered across a network by an authority.
- 58. (Currently amended) A method for providing transaction services according to Claim
 34 wherein the transaction machine ATM or Kiosk communicates is adapted to communicate status information to a remote station.
- 59. (Currently amended) The method for providing transaction service of Claim 37 wherein said at least one of said transaction objects provide, separately or in combination with other transaction objects and controls, encapsulates encapsulation of software logic required for performing at least a portion of a transaction.



- 61. (Original) The method of Claim 37 further comprising the step of creating a separate thread for each of a plurality of controls.
- 62. (Original) The method of Claim 35 further comprising the step of enabling said application program to communicate over said communication interface through a control.
- 63. (Original) The method of Claim 37 wherein at least one of said controls implements an OFX interface or a portion thereof, to facilitate communication with an OFX server.
- 64. (Original) The method of Claim 34 wherein said middleware software provides generic error handlers.
- 65. (Currently amended) The method of Claim 35 further comprising configuring a plurality of <u>ATMs or Kiosks</u> transaction machines, and wherein configuration data for said step of configuring is centrally held in a distribution file.
- 66. (Original) The method of Claim 38 further comprising the step of constructing said user interface using common web authoring tools.



68. (Currently amended) An ATM or Kiosk comprising

at least one transaction device of at least one transaction device type with the capabilities of transaction devices within the transaction device type being non-identical between more than one ATM or Kiosk across a network of ATMs or Kiosks,;

said ATM or Kiosk being controlled by at least one software application and an operating system which are installed in the ATM or Kiosk, the at least one software application and the operating system controlling and receiving and which control and receive information from said at least one transaction device type;

through a programming interface of middleware software through which the at least one software application and the operating system control and receive information from said at least one transaction device type, wherein the programming interface of middleware software comprises comprising transaction objects providing transaction services, wherein the particular transaction services provided by the transaction objects depend on the capabilities of the transaction device type, with different transaction services being provided for different transaction device capabilities, but the programming interface of the transaction objects is independent of the capabilities of the transaction device.

69. (Previously presented) The ATM or Kiosk of Claim 68 wherein said ATM or Kiosk further comprises a data communications interface and wherein said ATM or Kiosk is adapted to communicate over said data communications interface.

70. (Cancelled)

- 71. (Previously presented) An ATM or Kiosk according to Claim 68 wherein the transaction objects are controls for performing standardized device functions.
- 72. (Previously presented) An ATM or Kiosk according to Claim 71 wherein said ATM or Kiosk comprises a customizable user interface.
- 73. (Previously presented) An ATM or Kiosk according to Claim 72 wherein said transaction objects are independent of said user interface.
- 74. (Previously presented) An ATM or Kiosk according to Claim 73 further comprising a plurality of controls, at least one of which comprises a capabilities interface.
- 75. (Previously presented) An ATM or Kiosk according to Claim 74 wherein the capabilities interface can communicate the capabilities of the control.
- 76. (Previously presented) An ATM or Kiosk according to Claim 71 wherein applications, objects and controls are concurrently operable.

- 77. (Currently amended) An ATM or Kiosk according to Claim 68 wherein controls are constructed with an event generating capability and wherein [[a]]] said controls are operable in a selectable mode in which said events are queued up and delivered to an application on demand.
- 78. (Previously presented) An ATM or Kiosk according to Claim 68 wherein said middleware software is adapted to provide service in accordance with at least one software standard for interacting with different hardware systems.
- 79. (Previously presented) The ATM or Kiosk according to Claim 78 wherein said at least one software standard is selected from a group consisting of WOSA XFS, OPOS, OFX, TOPEND®, ActiveX®, Javabeans, SNMP.

80-82 (Cancelled)

- 83. (Previously presented) An ATM or Kiosk to Claim 68 wherein said at least one software application is operable from within a web browser environment.
- 84. (Previously presented) An ATM or Kiosk according to Claim 83 wherein a web browser provides support for software distribution.
- 85. (Previously presented) An ATM or Kiosk according to Claim 83 further comprising a web browser frame containing at least one device control operable to detect events which must be responded to upon occurrence.

- 86. (Previously presented) An ATM or Kiosk according to Claim 68 wherein said middleware software comprises a plurality of COM components having a scriptable ActiveX® interface.
- 87. (Previously presented) An ATM or Kiosk according to Claim 68 wherein said middleware software comprises a plurality of JavabeansTM components having a scriptable interface.
- 88. (Previously presented) An ATM or Kiosk according to Claim 68 wherein a web browser is adapted to communicate with conventional web sites to be displayed by the ATM or Kiosk.

89 and 90. (Cancelled)

- 91. (Previously presented) An ATM or Kiosk according to claim 68 wherein the ATM or Kiosk is adapted to allow the software applications and middleware to be altered across a network by an authority.
- 92. (Previously presented) An ATM or Kiosk according to claim 68 wherein the ATM or Kiosk is adapted to communicate status information to a remote station.
- 93. (Currently amended) The ATM or Kiosk of claim 71 wherein said at least one of said transaction objects provides provide, separately or in combination with other transaction

objects and controls, encapsulation of software logic required for performing at least a portion of a transaction.

- 94. (Previously presented) The ATM or Kiosk of claim 71 wherein at least one of said controls is a device control, providing abstraction of details of a device controlled by said device control.
- 95. (Currently amended) The ATM or Kiosk of claim 71, wherein further comprising the step of creating a separate thread for each of a plurality of the controls comprises means for creating a separate thread.
- 96. (Currently amended) The ATM or Kiosk of claim 71, wherein further comprising the step-of at least one of the controls comprises means for enabling said application program to communicate over said communication interface through a control.
- 97. (Previously presented) The ATM or Kiosk of claim 71 wherein at least one of said controls implements an OFX interface or a portion thereof, to facilitate communication with an OFX server.
- 98. (Previously presented) The ATM or Kiosk of Claim 68 wherein said middleware software provides generic error handlers.

- 99. (Currently amended) A network comprising The ATM or Kiosk of Claim 69 further comprising configuring a plurality of ATMs or Kiosks according to Claim 69, and wherein configuration data for said step of configuring the ATMs or Kiosks is centrally held in a distribution file.
- 100. (Currently amended) The ATM or Kiosk of Claim 72, wherein further comprising the step of constructing said user interface is adapted to be constructed using common web authoring tools.
- 101. (Previously presented) The ATM or Kiosk of Claim 68 wherein said operating system is Microsoft Windows NT.
- 102. (Previously presented) A network comprising a plurality of ATMs or Kiosks according to Claim 68, one or more networking means and one or more application servers.
- 103. (Previously presented) An Extranet formed by combining a plurality of networks of ATMs or Kiosks according to Claim 102.
- 104. (Previously presented) An Extranet according to Claim 103 provided with a security mechanism which limits the hardware functionality available to individual software applications.

105. (Previously presented) A method of providing transaction services according to claim 34 wherein said ATM or Kiosk computer-based transaction machine is operated by a first organization, wherein said software application is provided by a second organization, and wherein said software application provides a transaction type different than the transaction type associated with said first organization.

106. (Previously Presented) A method for selling tickets comprising the steps of:
operating, by a first organization, a computer based automated teller machine of a first
network, the computer based automated teller machine having a data communication interface, a
display device, an input device, and at least one transaction device adapted for user identification;

executing a software application on said computer based automated teller machine, said software application being adapted to issue tickets for events or services provided by a second organization through a second network, wherein the second network is dissimilar to the first network and the software application allows cooperation directly therebetween; and,

automatically charging a user account for said ticket utilizing facilities provided by said automated teller machine.

- 107. (Original) The method of selling tickets of Claim 106 wherein said tickets are selected from a list comprising airline tickets, cinema tickets and theatre tickets.
 - 108. (Original) A method for selling tickets comprising the steps of:

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operating, by a first organization, a computer based kiosk having a data communication interface, a display device, an input device, and at least one transaction device adapted for user identification;

executing a software application on said computer based kiosk, said software application being adapted to issue tickets for events or services provided by a second organization; and,

automatically charging a user account for said ticket utilizing facilities provided by said kiosk.

- 109. (Original) The method of selling tickets according to claim 108 wherein said tickets are selected from a list comprising airline tickets, cinema tickets and theatre tickets.
- 110. (Previously Presented) A method for providing transaction services according to Claim 34, further comprising the step of creating an event thread associated with each transaction service for insuring that device states persist from one application page to another.
- 111. (Previously Presented) A method for providing transaction services according to Claim 34, further comprising the step of encapsulating essential software logic of the transaction services so that an associated user interface is freely defined.
- 112. (New) A method for providing transaction services according to Claim 34 in a network comprising a plurality of ATMs or Kiosks each having at least one transaction device of at least one transaction device type, the at least one transaction device having capabilities, wherein the

capabilities of a transaction device of at least one transaction device type in at least one of the ATMs or Kiosks are different from the capabilities of a transaction device of the same transaction device type in at least one other of the ATMs or Kiosks, and wherein different transaction services are provided for the different transaction device capabilities.

113. (New) A network comprising a plurality of the ATMs or Kiosks according to Claim 68, wherein the capabilities of a transaction device of at least one transaction device type in at least one of the ATMs or Kiosks are different from the capabilities of a transaction device of the same transaction device type in at least one other of the ATMs or Kiosks.